



Date: August 8, 1995

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Subject: Metric Implementation Group
August 8, 1995 Minutes

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Here are the highlights of our Metric Implementation Group (MIG) meeting of August 8, 1995.

Progress Toward Meeting Benchmark Date

- At our last meeting we agreed to abandon the project matrix for a new, less cumbersome tracking document. Jim Michal developed and passed out a, "To Do" list which includes only the unfinished tasks. The list will be updated after each meeting and used to monitor progress of the remaining metric elements.
- Gary Beaver has been working with the Local Agencies to ensure their metric compliance by the October 1, 1996 deadline. Local Agency progress is on schedule.

Spreading the Word

- Jim Michal is the coordinator for metric *Express* articles. Please keep them coming.

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- The September issue of *Pacific Builder* will showcase the Department's metric elements in a cover article. The article will include information about our metric pilot project and the Department's metric progress and direction. Look for *Pacific Builder* on a newsstand near you.
- Currently available metric give-a-ways include the FHWA Metric Cube and English to metric and vice-versa conversions slide rule. Rick Glad, Jim Leonard, and Jim Michal have them available for the asking.

Standard Plans

- All changes to the English Standard Plans have been made and the English version will be printed in late September.
- No more English revisions will be accepted and the Standard Plans team is now focusing their efforts, full time, on metricating the Standard Plans.
- About 25 of our English version Standard Plans are now read-accessible on InterNet through WSDOT's Home Page.
- Approximately 100 of the 250 Standard Plans are now in metric. **The Regions need to let Jim Michal know what plans should be metricated first, so priorities can be set.**

Rebar Issues

- The AASHTO Task Force on Metrication polled the SHA's regarding their preference of soft versus hard conversion for rebar and the vote was 26 for hard conversion/23 for soft conversion. Consequently, no formal guidance will come from AASHTO until at least May, 1996.
- WSDOT has opted to go with soft conversion, mainly do to the cost and potential confusion with English and metric rebar inventories. Furthermore, WSDOT will keep the same bar designation (3 thru 11, 14, 18) currently in use, specifying rebar sizes in metric.
- **This change in metric rebar philosophy will necessitate the stewards of affected Manuals and other documents (Standard Specifications, General Special Provisions, etc.) to review the Manuals and documents, making all necessary changes.**

Pilot Project

- Ken Johnson outlined his experiences and perceptions from his perspective as Project Engineer of the Department's pilot metric project, SR-20 I-5 Northbound Ramp to Sterling Road:
 - There is still the, "need to convert" mind set.

- Some, albeit minor, equipment purchases are necessary (level rods, tapes, measuring wheels, scales to measure drawings, etc.).

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- Contractors indicated bidding took more time because it was necessary to convert back to English units in order to reference pricing history.
- The Prime Contractor (Lakeside) gave metric training to their crew. Sub-contractors didn't fare so well.
- Guardrail and electrical hardware costs were two to three times more than English equivalents. These costs will decrease as more metric hardware is specified.
- Maintenance will need to keep dual inventories of component parts for quite some time.

Metrics on the InterNet

- The WSDOT InterNet Home Page has, or soon will have, the following metric offerings:
 - GSP's, both metric and English.
 - Simple conversion factors.
 - Answers to commonly asked metric questions posed by Home Page users.

Metrics and the Permitting Agencies

- As we head down the metric home stretch, we are finding non-metric customers along the way. Clearly, permitting agencies can be included in this group as well as the general public at open houses and hearings.
- The MIG determined that dual units - metric with English (in parenthesis)
 - are both appropriate and necessary on plans furnished to permitting agencies and the general public. Since the need for dual units varies from agency to agency and from region to region, **it will be the responsibility of each region to determine what plans need to be in dual units and what plans don't.**
- CADD generated drawings allow the flexibility to place the English equivalents at a separate/unique level, this enabling dual units or not as the needs arise. This procedure will be discussed at two upcoming meetings:
 - CADD Coordinators by Jim Michal
 - Regional Environmental Coordinators by Rick Smith

Traffic

- The National Highway Institute Course, *Metric Training for Highway Agencies*, has been developed into a computer based self-paced program that runs in PC format. A Site License for the course was purchased by the Department allowing the courseware to be freely copied on WSDOT computers. Students are provided the course manual to accompany the

program. The course provides further examples of applications of metrics to transportation projects. Copies are being distributed by Staff Development Office. Call Rick Glad at (360) 705-7067 to request a copy.

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Other Issues

- Jan Myhr and Jim Michal continue to work through the 964 references to English units in the WAC's and RCW's. They are about 80 percent complete.
- The planning meeting for next year's National Metric Conference is next month. Please send any ideas for topics or presenters to Jan Myhr.
- Chris Kemp indicated a metric conversion program, ConvertFile Conversion Utility is available in the Service Center and at least one server in every region. People in need of the Conversion Utility can call Chris at (360) 705-7644 for access.
- Rumors continue to circulate that FHWA is considering backing off the metric mandate and giving each state the discretion to proceed with or dump metrics as each state sees fit. Jim Leonard called Washington, D.C. for verification of the rumor. Jim was told that FHWA was not backing off metrics and it's, "full speed ahead". This topic will undoubtedly generate some discussion at the AASHTO Annual Meeting in October in Norfolk.

Next Meeting

- Tuesday, September 12th, 10 a.m. - 3 p.m. Olympia Service Center Conference Room (2F22).
- We will be addressing the following issues:
 - Review and update metric, "Two Do" list.
 - Standard Plan Update.
 - FHWA Update.
 - Metric Progress within Regions.
 - Metric Coordination with Permitting Agencies.

Thank you for your ongoing contributions.

DCJ::jc

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